

ABSTRACT

A method of designing fold lines in sheet material includes the steps defining the desired fold line in a parent plane on a drawing system, and populating the fold line with a fold geometry including a series of cut zones that define a series of connected zones configured and positioned relative to the fold line whereby upon folding the material along the fold line produces edge-to-face engagement of the material on opposite sides of the cut zones. Alternatively, the method may include the steps storing a plurality of cut zone configurations and connected zone configurations having differing dimensions and/or shapes, defining a desired fold line in a parent plane on a drawing system, selecting a preferred cut zone and/or a preferred connected zone which have a desired shape and scale, locating a preferred fold geometry along the fold line, the preferred fold geometry including the selected cut zone and the selected connected zone, and relocating, rescaling and/or reshaping the preferred fold geometry to displace, add and/or subtract at least one of the connected zones, whereby upon folding the material along the fold line produces edge-to-face engagement of the material on opposite sides of the cut zones. A computer program product and a system configured for implementing the method of designing fold lines in sheet material is also disclosed.